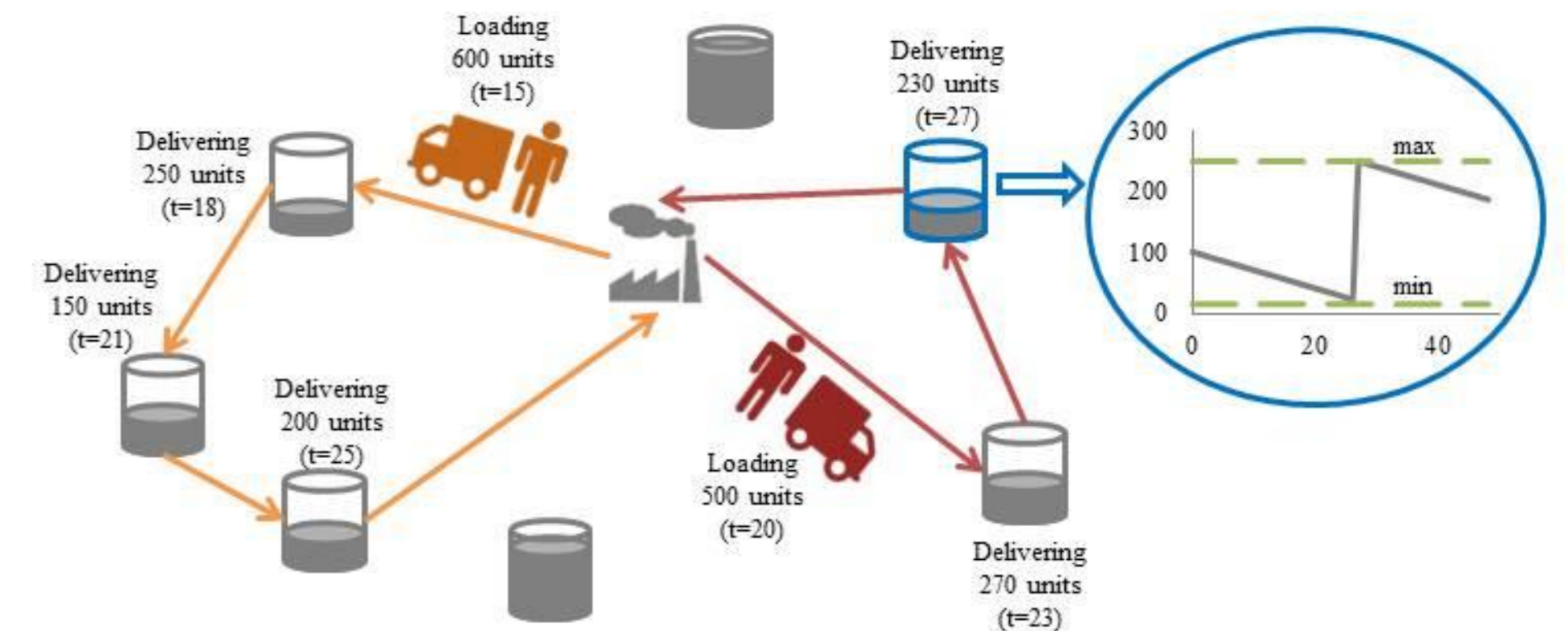


SISTEM TRANSPORTASI DAN DISTRIBUSI BARANG

Integrasi Perutean Kendaraan dan Persediaan

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Integrasi Manajemen Persediaan dan Perutean Kendaraan (IRP)



Integrasi Manajemen Persediaan dan Perutean Kendaraan (Inventory Routing Problem)

Definition:

Strategi distribusi yang meminimalkan jumlah stok habis dan pada saat yang sama menyadari potensi penghematan dalam biaya distribusi.

Inventory routing problem (IRP) menggabungkan masalah routing dengan manajemen persediaan untuk mengurangi biaya distribusi



Karakteristik IRP

Cost elements:

- Transportation costs
- Shortage costs
- Inventory holding costs

Decision Variable:

- When to deliver?
- How much to delivery?
- Which delivery routes to use?

Shipping Time:

- Continuous
- Continuous with a minimum inter-shipment time
- Discrete

Planning Horizon:

- Infinite
 - Finite
- 



Jenis-jenis IRP

- IRP with single/multiple facilities
- IRP with single/multiple customers
- IRP with single/multiple products
- IRP with planned time horizon
- Set of limited/unlimited homogeneous vehicles with capacity

Contoh IRP

Industrial
Gases

Petrochemical
Industry

Automotive
Industry

Food Industry

Blood
Collection